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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,584	09/17/2003	Jason David Evans	MRKS/0121	3686

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EXAMINER

BOCHNA, DAVID

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/664,584

Applicant(s)

EVANS ET AL.

Examiner

David E. Bochna

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43, 46-53, 55-65 and 67-84 is/are pending in the application.
4a) Of the above claim(s) 28-42, 62, 79 and 83 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-6, 9-27, 43, 46-50, 55-61, 63-65, 67-78, 80-82 and 84 is/are rejected.
7) ☒ Claim(s) 7, 8 and 51-53 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 17 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the subject matter of claim 51 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 1 is objected to because of the following informalities: Line 8, "retraining" should be "restraining". Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6, 9-15, 71-76 and 80 are rejected under 35 U.S.C. 102(b) as being anticipated by Campbell '745.

In regard to claims 1 and 3, 76 and 80, Campbell discloses a tubing connection arrangement comprising:

a first expandable tubing section 24 defining a male portion 35; a second expandable tubing section 22 defining a female portion 39, the first and second expandable tubing sections being engageable with one another; one of the first and second expandable tubing sections including a restraining member 32 for restraining part of the other expandable tubing section upon expansion of the section, the restraining member extending from a distal end 22 of the second tubular and including an area 38 of reduced thickness permitting flexible movement of the restraining member about the area of the reduced thickness; and the first expandable tubing section including a tapered shoulder 37 for cooperating with a corresponding tapered shoulder 34 of the second expandable tubing section.

Art Unit: 3679

In regard to claim 2, wherein the first expandable tubing section includes first 39 and second 34 axially spaced shoulders for cooperating with corresponding first 35 and second 37 axially spaced shoulders of the second expandable tubing section.

In regard to claim 4, wherein the face 37, 39 is formed on an axial end of the respective tubing section.

In regard to claim 5, wherein the expandable tubing sections include a radially extending shoulder member 35 or 34 or 37 or 39 defining the shoulder.

In regard to claim 6, wherein each expandable tubing section includes a first shoulder 39, 37 comprising a face on an axial end thereof and a radially extending shoulder 34, 35 member defining a second shoulder.

In regard to claim 9, the restraining member 33 extends from an axial end of the second expandable tubing section 24 (cylindrical sleeve 30 extends from the end of pipe 24).

In regard to claim 10, wherein the restraining member 33 extends from the female portion of the second expandable tubing section 24.

In regard to claim 11, wherein the restraining member 32 is adapted to extend in an axial direction along an outer surface of part 27a of the first expandable tubing section 22.

In regard to claim 12, wherein the restraining member 30 is adapted to extend in an axial direction along an outer surface of part of the second expandable tubing section 24.

In regard to claim 13, wherein the restraining member comprises a sleeve 30.

In regard to claim 14, wherein the sleeve 30 comprises slotted tubing 27b.

In regard to claim 15, wherein the sleeve 30 defines a number of separate arms or fingers

Art Unit: 3679

In regard to claim 71, wherein one of the first and second expandable tubing sections includes a restraining member 42.

In regard to claim 72, wherein the male portion 22 of the first expandable tubing section comprises a pin and the female portion 24 of the second expandable tubing section comprises a box.

In regard to claim 73, wherein the male and female portions of the first and second expandable tubing sections define upsets 34, 35.

In regard to claim 74, wherein the tubing connection arrangement is a downhole tubing connection arrangement.

In regard to claim 75, a downhole tubing comprising a tubing connection arrangement as claimed in claim 1.

5. Claims 16-19, 24-25, 27 and 77-78 are rejected under 35 U.S.C. 102(b) as being anticipated by Strickland et al.

In regard to claims 16, 24-25, 27 and 77-78, Strickland discloses a first expandable tubing section defining a threaded male portion 2 having lead and back thread flanks; and

a second expandable tubing section defining a threaded female portion 1 having lead and back thread flanks, the first and second expandable tubing sections being engageable with one another;

the lead thread flanks of the threaded male portion disposed at an angle different from that of the lead thread flanks of the threaded female portion.

In regard to claims 17-19 wherein the difference between the threads is approximately 2

Art Unit: 3679

percent (term approximately leaves the claim open to a wider range and the difference in the difference in thread pitch and corresponding flange angle of Strickland et al. is relatively small).

6. Claims 43 and 47-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Lohbeck.

In regard to claim 43, Lohbeck discloses a tubing connection arrangement comprising: a first expandable tubing section 24 defining a male portion 35; a second expandable tubing section 22 defining a female portion, the first and second expandable tubing sections being engageable with one another; and the second expandable tubing sections including a non threaded restraining member 40 extending from a distal end thereof for restraining part of the first expandable tubing section, the restraining member including a hinge 38 about which the restraining member is adapted to bend on expansion of a portion of the first expandable tubing section.

In regard to claim 47, wherein the hinge 38 is integral with the restraining member 40.

In regard to claim 48, wherein the hinge 38 comprises a living hinge.

In regard to claim 49, wherein the hinge 38 is defined by a zone of weakness in the restraining member.

In regard to claim 50, wherein the zone of weakness 38 comprises an area of relatively thin cross-sectional thickness than a remainder of the restraining member.

In regard to claim 55, the hinge 38 is provided in the same axial position of the restraining member as a bending zone on the overlapped expandable tubing section.

7. Claims 56-61, 63-65, 81-82 and 84 are rejected under 35 U.S.C. 102(e) as being anticipated by Campbell et al. '109.

Art Unit: 3679

In regard to claims 56 and 81, Campbell et al. discloses a tubing connection arrangement comprising: a first expandable tubing section (see fig. 13) defining a threaded male portion; a lip portion and an end face;

a second expandable tubing section defining a threaded female portion, a lip portion and an end face, the first and second expandable tubing sections being engageable with one another to form a threaded connection; and

wherein a cross-sectional thickness of the first expandable tubing section is greater in the region of the male threaded portion than at a point axially spaced from the male threaded portion, wherein expansion of the tubing sections the bending substantially occurs axially on either side of the engaged threaded portions rather than across the threaded connection (the joint is thicker than the pipe wall to either side of the joint).

In regard to claim 57, wherein the point (pipe wall) is spaced axially from the male portion in a direction away from an end of the first expandable tubing section defining the male portion.

In regard to claim 58, wherein the point comprises an area extending at least part way along a length of the first expandable tubing section immediately adjacent the male portion.

In regard to claim 59, wherein the first expandable tubing section includes a shoulder (72 in fig. 6) for co-operating with a corresponding shoulder of the second expandable tubing section.

In regard to claim 60, wherein the point is immediately adjacent the shoulder 15 of the first expandable tubing section.

Art Unit: 3679

In regard to claims 61 and 82, Campbell discloses a first expandable tubing section 71 defining a threaded male portion and a threaded radial hole 70 extending through the threaded male portion and adapted to receive a threaded locking member 76;

a second expandable tubing section 75 defining a female portion, the first and second expandable tubing sections being engageable with one another and the second expandable tubing section including a bore with a countersunk portion, the bore extending through the threaded female portion and adapted to receive the threaded locking member when the threaded hole of the first expandable tubing section is aligned with the bore of the second expandable tubing section, for restraining the sections against relative rotation.

In regard to claims 63 and 84, Campbell discloses a tubing connection arrangement comprising:

a first expandable tubing section 71 defining a male portion; a second expandable tubing section 75 defining a female portion, the first and second expandable tubing sections being engageable with one another; and the first expandable tubing section including first and second axially spaced shoulders 70, 72 for co-operating with corresponding first and second axially spaced shoulders of the second expandable tubing section, the length of the male portion between the first and second shoulders being selected to minimize bending of the male and female portions on expansion, wherein more than half of the length between the respective first and second shoulders is threaded to minimize separation of the first expandable tubular from the second expandable tubular upon expansion of the connection arrangement.

In regard to claim 64, wherein the male 71 and female 75 portions are threaded.

Art Unit: 3679

In regard to claim 65, wherein a majority of the length of the male and female portions between the respective first and second shoulders is threaded.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 20-23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strickland et al. Strickland et al. discloses a tubing connection arrangement comprising a first expandable tubing section defining a threaded male portion having lead and back thread flanks; and a second expandable tubing section defining a threaded female portion having lead and back thread flanks at a different angle, the first and second expandable tubing sections being engageable with one another, but Strickland et al. does not specifically disclose that the threads of the male and female portions are 83 degrees or 45 and 43 degrees respectively. However, it would have been obvious to a person having ordinary skill in the art to make the threads at the disclosed angles because a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

10. Claims 67-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell '745 in view of PCT WO 00/0831. Campbell discloses a threaded connection as described above, but does not disclose the use of a filter screen on the tubing connection. PCT WO 00/0831 demonstrates that using screens on expandable couplings to keep debris out of a well is common and well known in the art. Therefore it would have been obvious to a person having

Art Unit: 3679

ordinary skill in the art at the time the invention was made to modify the connection of Campbell to include a filter screen, because the practice of using filter screens with expandable down hole couplings was known, as shown by PCT WO 00/0831.

Allowable Subject Matter

11. Claims 7-8 and 51-53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

12. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

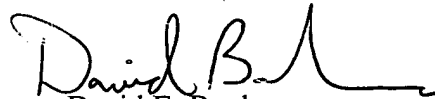
Art Unit: 3679

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Bochna whose telephone number is (571) 272-7078.

The examiner can normally be reached on 8-5:30 Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


David E. Bochna
Primary Examiner
Art Unit 3679